## The Vermont Mathematics Initiative (VMI) Is Hosting a Summer Institute for High School Teachers!

## Discrete Mathematics For High School Teachers

**Dates and Time: July 12-16 from 8:00 to 4:30** 

**Location: UVM (classroom TBD)** 

The total cost will includes 3 UVM graduate credits, a catered lunch each day, and overnight lodging (if desired).

The lead instructors for the course are Jeff Dinitz and Doug Dickey, UVM math faculty.

**Brief course description.** Discrete math topics are becoming more common in high school curricula and there is an escalating need for teachers to get exposure to ideas, methods and applications in this area in order to be better prepared to facilitate student discovery. This can only happen after teachers have looked deeply at the fundamental ideas which span seemingly unrelated topics, and have developed the habits of mind consistent with mature problem solving.

This course in discrete mathematics for high school teachers will draw from topics in the following areas of study: basic counting methods, the binomial theorem, recursion and generating functions, graph theory, logic and truth tables, Latin squares, set theory, inclusion-exclusion, and fair division and voting. This one week course will be structured in a problem solving format which will promote assisted discovery, communication of process & examination of alternate solution routes.

For more information contact VMI at 802-656-8186 vmi@cems.uvm.edu